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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/054,933	04/03/1998	CRAIG R. FRINK	A0521/7153	3289

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EXAMINER

BUI, KIEU OANH T

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 03/31/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/054,933

Applicant(s)

FRINK, CRAIG R.

Examiner

KIEU-OANH T BUI

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless -
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.*

3. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Munson et al. (US Patent 5,760,794).

Regarding claim 1, Munson discloses "an output interface for a sender of video data having an output for providing video data, and a valid data signal associated with the data indicating whether the associated data includes valid video data; and a valid command signal indicating whether the data includes command data; and wherein the command data includes a memory address at a receiver of the data, wherein the output interface transfers data and asserts one of the valid data signal and the valid command signal to the receiver in response to a request signal received from the receiver", i.e., Munson discloses an interconnection for video processing using a Direct Memory Access (DMA) controller 106, with DMA Arbiter 107 acting as its output interface, as a sender for providing output video data to a receiver such as either a

Peripheral Component Interconnect (PCI) memory 111 or a graphics memory 113 (Fig. 4) via a PCI interface 109 and PCI bus 115, and the step of verifying a valid video data and a valid command data as the inclusion of memory address within the command data at the receiver in response to a request signal, i.e., DMA request signal, received from the receiver (see Figs. 4 & 16, and col. 5/line 55 to col. 6/line 13; col. 16/line 47 to col. 17/line 6; col. 19/lines 15-60; and col. 27/lines 25-58 for a linked list of commands in order to understand more the operation of data transferring among the DMA controller to either a PCI memory or a graphic memory with memory addresses concerned).

Regarding claim 2, Munson discloses “an input interface for a receiver of video data having an input for receiving data, and a valid data signal associated with the data indicating whether the associated data includes valid video data; and a valid command signal indicating whether the data includes command data; wherein the command data includes a memory address at the receiver, wherein the input interface transfer video data received to the memory address specified in the command data in the memory of the receiver”, i.e., Munson discloses an interconnection for video processing using a Direct Memory Access (DMA) controller 106 as a sender for providing output video data to a receiver such as either a Peripheral Component Interconnect (PCI) memory 111 or a graphics memory 113 (Fig. 4) via a PCI interface 109 and PCI bus 115; indeed, PCI I/F 109 is an input interface for receiver PCI memory and graphics I/F 114 is an input interface for graphics memory 113 (Fig. 4); and the step of verifying a valid video data and a valid command data as the inclusion of memory address within the command data at the receiver in response to a request signal, i.e., DMA request signal, received from the receiver (see Figs. 4 & 16, and col. 5/line 55 to col. 6/line 13; col. 16/line 47 to col. 17/line 6; col. 19/lines 15-60; and col. 27/lines 25-58 for a linked list of commands in order to understand more the operation of data transferring among the DMA controller to either a PCI memory or a graphic memory with memory addresses concerned).

As for claim 3, which is a combined limitations of claims 1 and 2, is rejected for the reasons given in the scope of claims 1 and 2 as already discussed in details above.

As for claim 4, in further view of claim 3 above, Munson further discloses comprising: a memory (Fig. 4/111 & 113); and wherein the input of the input interface further receives a valid command signal indicating whether the data includes command data, wherein the command data includes a memory address in the memory of the device, wherein the input interface transfers valid data received to the memory address specified in the command data in the memory of the device (see Examiner's discussion in claim 2 above).

As for claim 5, in further view of claim 3 above, Munson further discloses comprising "a queue of memory addresses sent in command data to the other device, and wherein the input of the input interface further receives a valid command signal indicating whether the data includes command data; wherein the command data includes a memory address in the memory of the other device, wherein the input interface determines whether the memory address corresponds to a memory address in the queue", i.e., a sequence of command data as a queue stored in a linked list of commands containing contents which specifies valid memory addresses for read/write processes to either main memory PCI or to graphics memory (col. 27/lines 25-58).

Regarding claims 6-8, Munson discloses "a device for providing video data to another device, comprising: a memory for storing video data; an input interface having an input for receiving data, and a valid command signal indicating whether the data includes command data, wherein the command data includes a memory address in the device, wherein the input interface reads video data from the memory in the device using the memory address specified in the command data; an output interface having an output for providing data, and a valid data signal associated with the data indicating whether the associated data is valid video data; wherein the output interface transfers the video data read from the memory to the other device in response to a request signal received from the other device"; "wherein the input of the input interface further

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receives a valid data signal indicating whether the data includes valid video data, wherein the input interface transfers valid data received to the memory address specified in the command data in the memory of the device”; and further “comprising a queue of memory addresses received in command data from the other device; and wherein the output of the output interface further sends a valid command signal indicating whether the data includes command data, wherein the command data includes a memory address in the memory of the device, wherein the input interface outputs a memory address from where the data was read” (see claims 1-2 and 4-5 above).

As for claims 9 and 10, Munson discloses “a device for receiving video data from another device” with its input interface and its output interface; and “a device for writing video data to a memory in another device” with its “output interface wherein the output interface transfers data to the other device in response to a request signal received from the other device” (see Examiner’s discussion in claims 1-2 and 4-5 above).

Conclusion

4. **Any response to this action should be mailed to:**
Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (703) 305-0095. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Krista Bui
Art Unit 2611
March 20, 2003